

III. CLAIM AMENDMENTS

1-40. (Cancelled)

41. (New) A slicing machine for slicing food products (1), in particular blocks of sausage, meat or cheese, having a rotating cutting blade (2), which is mounted so as to be displaceable parallel to its axis of rotation (3), characterised in that it comprises a counterweight (4), which may be displaced in the opposite direction from the cutting blade (2).

42. (New) A slicing machine according to claim 41, characterised in that displacement of the cutting blade (2) and/or of the counterweight (4) is preferably effected by a feedback-controllable drive (6, 8, 9).

43. (New) A slicing machine according to claim 41, characterised in that displacement of the cutting blade (2) and/or of the counterweight (4) takes place independently of the rotational speed of the cutting blade.

44. (New) A slicing machine according to claim 41, characterised in that the cutting blade comprises a drive shaft (5) and in that the cutting blade (2) and/or the counterweight (4) is(are) mounted so as to be displaceable along the drive shaft (5).

45. (New) A slicing machine according claim 41, characterised in that displacement of the cutting blade (2) and/or of the counterweight (4) is effected with at least one spindle (6).

46. (New) A slicing machine according to claim 45, characterised in that the spindle (6) interacts with the thread (13, 14) of at least one sleeve (8, 9), which is connected with the cutting blade or the counterweight.

47. (New) A slicing machine according to claim 46, characterised in that the threads (13, 14) of the sleeves (8, 9) are different.

48. (New) A slicing machine according to claim 1, wherein the displacement mechanism (6, 8, 9) of the blade (2) and/or of the counterweight (4) is temperature-controlled, preferably cooled.

49. (New) A slicing machine according to claim 1, wherein the blade (2) and/or the blade holder (7) is mounted using a means which may be bent and released again, preferably a disk.

50. (New) A method for axial displacement of cutting blades during operation, characterised in that a counterweight (4) on a drive shaft (5) of the cutting blade is displaced in the opposite direction from the cutting blade (2).

51. (New) A method according to claim 50, characterised in that displacement is effected synchronously.

52. (New) A method according to claim 50, characterised in that displacement of the cutting blade (2) and of the counterweight (4) is effected by a drive (6).

53. (New) Use of counterweights (4) displaceably axially in the opposite direction from a cutting blade (2) to stabilise running of the cutting blade (2) of a slicing machine, which blade is mounted so as to be displaceable parallel to its axis of rotation (3).

54. (New) Use according to claim 53, characterised in that forces and/or moments arising during displacement of the blade are compensated.

55. (New) Use according to claim 53, characterised in that the zero point may be adjusted by axial displacement of the cutting blade (2) of a slicing machine.

56. (New) Use according to claim 53, characterised in that the torque of the drive of the cutting blade is measured during displacement.

57. (New) Use of the axial displacement of the cutting blade for adjustment of the cutting gap between the cutting blade and

a cutting guide during operation of the blade, characterised in that expansion phenomena of the blade caused by thermal expansion and/or centrifugal forces are compensated.

58. (New) Use according to claim 57, characterised in that the desired cutting gap is set or modified via a display on the machine.

59. (New) Use according to claim 57, characterised in that the mechanical behaviour of the blade is stored as a model and/or by means of characteristic diagrams in the machine control system, for example a computer.

60. (New) Use according to claim 59, characterised in that these data are used for adjustment or readjustment of the cutting gap when the cutting blade is in operation.

61. (New) A device for slicing food products having a blade (27) exhibiting a cutting plane (26) and driven in rotation by a drive shaft (30) and having a cutting edge (28), the blade (27) being mounted so as to be displaceable parallel to its drive shaft (30) for adjustment of the cutting gap (29) between the cutting plane (26) and the cutting edge (28), characterised in that it comprises an adjusting limit stop (31) with which the cutting gap (29) may be established.

62. (New) A device according to claim 61, characterised in that the adjusting limit stop may be moved between a basic position and an adjusting position.

63. (New) A device according to claim 62, characterised in that adjustment of the adjusting limit stop is effected manually or by an actuator.

64. (New) A device according to claim 41, characterised in that the adjusting limit stop is a contact sensor.

65. (New) A device according to claim 41, characterised in that axial displacement of the blade is effected with a motor.

66. (New) A device according to claim 65, characterised in that the current consumption of the motor system may be measured and the motor is feedback-controllable by means of the current consumption.

67. (New) A device according to claim 41, characterised in that the position of the adjusting limit stop and thus the width of the cutting gap may preferably be selected by means of a display.

68. (New) A device according to claim 41, characterised in that adjustment of the cutting gap is effected when the blade is stationary or rotating.

69. (New) A device according to claim 41, characterised in that the axial position of the blade is not changed after it has come into contact with the adjusting limit stop.

70. (New) A method of adjusting the cutting gap using a device according to claim 61, characterised in that the adjusting limit stop is moved from its basic position into its adjusting position corresponding to the desired cutting gap and in that the blade is displaced axially until it comes into contact with the adjusting limit stop.

71. (New) A method according to claim 70, characterised in that the adjusting limit stop is brought into its basic position after adjustment of the cutting gap.

72. (New) A device for slicing food products, having a rotating cutting blade (27), which is displaceable parallel to its axis of rotation (30), characterised in that displacement is effected with at least one means (33) comprising a first (34) and second (35) end, the position of which relative to one another may be modified.

73. (New) A device according to claim 72, characterised in that the means is a coupling rod or a leaf spring.

74. (New) A device according to claim 72, characterised in that the first and second ends may be twisted relative to one another.

75. (New) A device according to claim 72, characterised in that the means (33) is bent.